REMARKS

The present application includes claims 1-20. Claims 1-20 were rejected by the Examiner. Claims 1, 5, 9, 10, 11, and 14 have been amended by this response.

Claim 1 has been amended to recite that software is provided for installation to a plurality of picture archiving and communication system workstations in response to an error detected by at least one workstation and reported to a server. Thus, the error is detected at one or more workstations, reported to a server, and software is provided for installation to a plurality of workstations. A web-based server is then directed to simultaneously install the software to the plurality of workstations. The Applicant submits that independent claim 1, as amended, and its dependent claims 2-4 should be allowable.

Claim 5 has been amended to recite that errors are detected by looking for an error indicator in a log file that is constructed by a client workstation. Claims 9 and 10 have been amended to recite that the files in which the error indicator is found are retrieved as part of Claim 5's retrieving step. The Applicant respectfully asserts that these limitations are not found in the prior art, and, thus, amended claim 5 and dependent claims 6-10 should be allowable.

Claim 11 has been amended to recite that the remote first terminal generates a remote signal in response to an error reported by the workstation. The Applicant respectfully submits that claims 11-13, as amended, should be allowable.

Claim 14 has been amended to recite that the remote first terminal generates a remote signal in response to an error reported by the workstation. The Applicant

respectfully submits that amended independent claim 14 and its dependent claims 15-16 are allowable.

Claims 1-4, 11-13, and 19-20 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Zur (U.S. Patent No. 6,178,225), in view of Allison (U.S. Patent No. 6,094,531), in further view of Kobata (U.S. Patent No. 6,321,348).

Claims 5-10 and 14-18 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Zur in view of Kobata.

The Applicant first turns to the rejection of claims 1-4, 11-13, and 19-20 under 35 U.S.C. § 103(a) as being unpatentable over Zur, in view of Allison, in further view of Kobata. Zur relates to metering x-ray image exposures for billing purposes. As discussed in a previous response, Zur is concerned with accurate and efficient billing of users of x-ray imaging facilities based on an actual number of accepted images as opposed to a total number of images taken. The aims and methods of Zur are quite different from the teachings of the present invention. One of ordinary skill in the art seeking to develop a remote software installation and error correction system would not have looked to Zur's metering and billing system for suggestions.

The system of Allison is a test system, configured in an experimental environment to test products before they are released on the marketplace. The test machines are wiped and returned to a "blank" or base state after one test in preparation for another test. One of ordinary skill in the art seeking to develop a remote software installation and error

correction system for use with a PACS would not have looked to Allison's testing system for suggestions. In the present invention, PACS workstations store valuable data and records and provide software services to users. A system with variable operating system installation followed by a wiping or resetting of information on that system would not be useful in such an environment.

Kobata discloses a system for ascertaining the demography of Internet users and providing software or consulting services based on the users' infrastructure data (col. 1, lines 12-15). This demography data includes "CPU power, hard disk space, applications installed, network connectivity, and log-in history" (col. 2, lines 32-34). The Kobata system's purpose is to resolve installation problems, specifically compatibility problems with certain peripherals (col.1, line 35) and between the user's hardware and software and the service provider's software (col. 1, line 24-26). Although Kobata does disclose remotely identifying problems, it does so based on analysis of user demography data (col. 2, lines 30-37). Thus, Kobata's purpose is to monitor remotely the configuration of machines with hardware and software configurations controlled by the end user, and download software or reconfigure individual machines to resolve compatibility problems. This purpose is very different from the present invention, which teaches responding to a software error reported by a medical imaging workstation by simultaneously updating or installing new software on a plurality of workstations. Because Kobata is focused on determining installation problems in varying end user machines, a person of ordinary skill in the art would not have looked to it in attempting to develop a remote installation and error correction system for a PACS.

One of ordinary skill in the art would not have combined the teachings of Zur, Allison, and Kobata in pursuit of the claimed invention. Despite their common use of computer systems, metering and billing systems for X-ray facilities are not related to a personal computer software and hardware test network capable of installing and subsequently clearing a plurality of operating systems on test computers, nor are they related to a system for analyzing demographic data provided by clients over the Internet.

Nonetheless, a theoretical combination of these systems would produce either a system to test x-ray billing systems by monitoring their configuration data or a testing system that meters accepted versus rejected tests on clients whose configuration data is analyzed for incompatibility problems and bills for such use of the testing network. None of the systems mention error reporting or upgrade and install of software to multiple medical imaging workstations to resolve reported errors. Neither the individual systems of Zur, Allison, and Kobata nor the combined theoretical testing/billing/configuration monitoring network would serve as a basis for one of ordinary skill in the art of the present invention at the time the invention was made.

Additionally, neither Zur, Allison, Kobata, nor their combination would teach or suggest a method for remotely enhancing a picture archiving and communication system (PACS) including establishing a network connection with a web-based server and periodically providing software for installation to a plurality of PACS workstations in response to an error detected at one or more of the workstations. These limitations are disclosed in independent claim 1. The combination does not teach or suggest directing the

web-based server to simultaneously install the software to the plurality of PACS

workstations and simultaneously installing the software. Although Kobata does relate in

some way to errors, its purposes are very different from the present invention. It is

directed to analysis of demographic data such as CPU power, disk space, and applications

installed to determine if compatibility problems exist. The present invention relies on the

workstation to report errors, while Kobata discovers installation problems (i.e.,

incompatibilities) based on analysis of broad demographic data at the server.

Therefore, the Applicant respectfully submits that independent claim 1 and its

dependent claims 2-4 should be in condition for allowance.

The combination of Zur, Allison, and Kobata does not teach or suggest a system

with a remote first terminal remotely monitoring a PACS workstation to generate a

remote signal requesting installation of software in response to an error at the workstation

and a web-based server including an installer for simultaneously installing software to a

plurality of PACS workstations responsive to the remote signal. These limitations are

recited in claim 11. Rather, Allison installs an operating system in a testing environment

in order to test new products. Neither Zur nor Allison discusses errors. Zur, Allison, and

Kobata do not install software on a plurality of medical imaging workstations in response

to a remote signal monitoring a medical imaging workstation. Kobata does not detect

errors in the same way or for the same purposes as the present invention. It looks for

compatibility problems based on an analysis of an individual workstation's demography

data, such as CPU power, hard disk space, and applications installed. The present

invention discloses locating an error message reported by the PACS software in a log file,

not determination of compatibility problems through expert or artificial intelligence analysis of general demography data. The combination does not teach or suggest generating a remote signal at a first PACS workstation for instructing the web-based server to install software at other PACS workstations on the same system, as recited in claim 12.

Thus, the Applicant respectfully submits that claims 11-13 should be allowable.

In addition, the combination of Zur, Allison, and Kobata does not teach or suggest connecting to a web-based server from a remote terminal on the Internet, instructing the web-based server to update pre-existing software on a plurality of PACS workstations in communication with the web-based server, and simultaneously updating the pre-existing software on the plurality of PACS workstations. These limitations are recited in independent claim 19. Rather, Allison teaches an operating system replacement on a machine or installation of an operating system on a blank machine for testing. Kobata teaches controlling the update process from a server, not from a remote terminal. Additionally, there is no update in Zur, Allison, or Kobata on multiple machines of software that is already on all of the multiple machines.

Therefore, the Applicant respectfully submits that claims 19 and 20 should be allowable.

The Applicant now turns to the Examiner's rejection of claims 5-10 and 14-18 under 35 U.S.C. § 103(a) as being unpatentable over Zur in view of Kobata.

One of ordinary skill in the art would have no reason to combine the remote

demographic analysis system of Kobata with the metering and billing system of Zur.

Combining the systems for the sake of argument would either provide analysis of billing

data or provide a metering and billing system to charge users for demographic analysis

and consulting services. Neither combination would teach all of the limitations of

amended claims 5-10 and 14-18.

For example, the combination would not teach or suggest identifying an error

occurring at one or more PACS workstations based on an error indicator retrieved from

one or more files at one or more PACS workstations at a remote terminal in

communication with a web-based server. The combination also would not teach or

suggest directing updates of special-purpose medical imaging software from a remote

terminal. These limitations are recited in independent claim 5 of the present application.

Rather, Kobata identifies potential installation problems based on expert or artificial

intelligence analysis of demographic data on a server in a general-purpose computing

environment. Kobata does not disclose a remote terminal, only a client and a server.

Similarly, the combination would not teach or suggest generating a remote signal

at a remote terminal in response to an error occurring at a PACS workstation connected

to a web-based server, retrieving data from one or more PACS workstations in response

to the remote signal, and providing remote identification and correction of an error via

the web-based server at one more PACS workstations by updating software stored on one

or more PACS workstations. These limitations are recited in independent claim 14.

Kobata does not disclose a method for updating multiple clients based on an error

detected at one client. Rather, it downloads software to one specific client based on an installation problem detected by analyzing that client's particular demographic data.

The combination would also not teach or suggest the remote analysis of log data from each of a plurality of PACS workstations in communication with a web-based server to indicate an error at the plurality of PACS workstations and remote correction of the error at the plurality of PACS workstations from a remote terminal using the web-based server. These limitations are recited in independent claim 17. Kobata relies on demography data such as CPU power, disk space, and applications installed, not log data from a special-purpose application.

Therefore, the teachings of claims 5-10 and 14-18 would not have been obvious. Thus, the Applicant respectfully submits that claims 5-10 and 14-18, as amended, should be allowable.
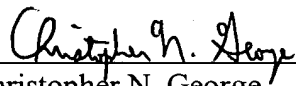
CONCLUSION

The Applicant respectfully submits that the present application is in condition for allowance. The Applicant thanks the Examiner for her work in examining the application and the prior art. If the Examiner has any questions or the Applicants can be of any assistance, the Examiner is invited and encouraged to contact the Applicants at the number below.

The Commissioner is authorized to charge any necessary fees or credit any overpayment to the Deposit Account of GEMS-IT, Account No. 502401.

Respectfully submitted,

Date: _____ June 25, 2004 _____   _____
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